

## Res. Asst. PhD AHMET AĐRI ARICAN

### Personal Information

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### International Researcher IDs

ScholarID: LstEdFcAAAAJ

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ScopusID: 57201992839

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### Education Information

Doctorate, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, Turkey 2017 - 2024

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), Turkey 2014 - 2017

Undergraduate, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 2009 - 2014

### Dissertations

Doctorate, Doğrusal olmayan sistemler için durum bağımlı bölgesel özdeğer atama tabanlı kontrolcü tasarımları ve uygulamaları, Gazi University, Fen Bilimleri Enstitüsü, 2024

Postgraduate, Durum bağımlı Riccati denklemi tabanlı optimal kontrolcü tasarımı ve üç serbestlik dereceli helikopter uygulaması, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (YI) (Tezli), 2017

### Research Areas

Nonlinear Systems, Stability, Optimal Control, Machine Theory and Dynamics, System Dynamics and Control, Robotics, Mechatronics, Modeling and Simulation of Dynamic Systems

### Academic Titles / Tasks

Research Assistant, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2018 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

- An Extension Algorithm of Regional Eigenvalue Assignment Controller Design for Nonlinear Systems**  
Arıcan A. Ç., Çopur E. H., Inalhan G., Salamci M. U.  
Aerospace, vol.10, no.10, pp.1-33, 2023 (SCI-Expanded)
- An update algorithm design using moving Region of Attraction for SDRE based control law**  
Çopur E. H., Arıcan A. Ç., Ozcan S., Salamci M. U.  
JOURNAL OF THE FRANKLIN INSTITUTE-ENGINEERING AND APPLIED MATHEMATICS, vol.356, no.15, pp.8388-

## Articles Published in Other Journals

- I. **Controller Designs for Nonlinear Systems with Application to 3 DOF Helicopter Model**  
KOCAGİL B. M., ARICAN A. Ç., Güzey Ü. M., Özcan S., SALAMCI M. U.  
Gazi University Journal of Science Part A: Engineering and Innovation, vol.4, no.3, pp.47-66, 2017 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Sliding Surface Optimization via Regional Pole Placement for a Class of Nonlinear Systems**  
Arıcan A. Ç., Çopur E. H., İnalhan G., Salamcı M. U.  
2023 27th International Conference on System Theory, Control and Computing (ICSTCC), Timisoara, Romania, 11 - 13 October 2023, pp.251-256
- II. **Sliding Mode Control of a 3-DOF Helicopter with State Dependent Regional Pole Placement**  
Arıcan A. Ç., Çopur E. H., İnalhan G., Salamcı M. U.  
2023 24th International Carpathian Control Conference (ICCC), Miskolc, Hungary, 12 - 14 June 2023, pp.15-20
- III. **State Dependent Regional Pole Assignment Controller Design for a 3-DOF Helicopter Model**  
Arıcan A. Ç., Çopur E. H., İnalhan G., Salamcı M. U.  
2023 International Conference on Unmanned Aircraft Systems (ICUAS), Warszawa, Poland, 06 June 2023, pp.1067-1072
- IV. **A Modified SDRE-based Sub-optimal Hypersurface Design in SMC**  
Ozcan S., Copur E. H., ARICAN A. Ç., SALAMCI M. U.  
21st IFAC World Congress on Automatic Control - Meeting Societal Challenges, ELECTR NETWORK, 11 - 17 July 2020, vol.53, pp.6250-6255
- V. **Experiment of Sliding Mode Control with Nonlinear Sliding Surface Design for a 3-DOF Helicopter Model**  
Guzey U. M., ÇOPUR E. H., Ozcan S., ARICAN A. Ç., KOCAGİL B. M., SALAMCI M. U.  
27th International Conference on Information, Communication and Automation Technologies (ICAT), Sarajevo, Bosnia And Herzegovina, 10 - 13 October 2019
- VI. **MRAC of a 3-DoF Helicopter with Nonlinear Reference Model**  
KOCAGİL B. M., Ozcan S., ARICAN A. Ç., Guzey U. M., ÇOPUR E. H., SALAMCI M. U.  
26th Mediterranean Conference on Control and Automation (MED), Zadar, Croatia, 19 - 22 June 2018, pp.278-283
- VII. **Linear and Nonlinear Optimal Controller Design for a 3 DOF Helicopter**  
ARICAN A. Ç., Ozcan S., KOCAGİL B. M., Guzey U. M., ÇOPUR E. H., SALAMCI M. U.  
19th International Carpathian Control Conference (ICCC), Szilvasvarad, Hungary, 28 - 31 May 2018, pp.185-190
- VIII. **Adaptive Control of a 3 DoF Helicopter with Linear and Nonlinear Reference Models**  
KOCAGİL B. M., Ozcan S., ARICAN A. Ç., Guzey U. M., ÇOPUR E. H., SALAMCI M. U.  
6th International Conference on Control Engineering and Information Technology (CEIT), İstanbul, Turkey, 25 - 27 October 2018
- IX. **Suboptimal Control of a 3 DOF Helicopter with State Dependent Riccati Equations**  
ARICAN A. Ç., Ozcan S., Guzey U. M., KOCAGİL B. M., SALAMCI M. U.  
XXVI International Conference on Information, Communication and Automation Technologies (ICAT), Sarajevo, Bosnia And Herzegovina, 26 - 28 October 2017

## Supported Projects

KOCAGİL B. M., ARICAN A. Ç., SALAMCI M. U., Project Supported by Other Official Institutions, Optimum Nonlinear Kazanç Katsayısı Kullanılarak Helikopter Rotor Kontrolcü Tasarımı, 2015 - 2018

## Metrics

Publication: 12

Citation (WoS): 22

Citation (Scopus): 42

H-Index (WoS): 3

H-Index (Scopus): 5

## Scholarships

2211-A Genel Yurt İçi Doktora Bursu, TUBITAK, 2018 - 2022

## Awards

Arıcan A. Ç., TÜBİTAK Uluslararası Bilimsel Yayınları Teşvik (UBYT) Programı Yayın Teşvik Ödülü, Türkiye Bilimsel Ve Teknolojik Araştırma Kurumu, October 2019

## Non Academic Experience

Gazi Teknoloji A.Ş.